

YO998-426DIV

REMARKS

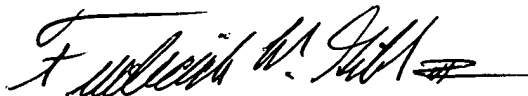
The above changes to the claims have been made to cancel claims being prosecuted in a separate application. This Preliminary Amendment leaves claims 18-24 pending in the present application.

The prior application is assigned of record to International Business Machines Corp., Armonk, New York, at Reel 009843, Frame 0970.

Early and favorable prosecution on the merits is respectfully requested.

Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-0510.

Respectfully submitted,



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20051562-011802

ATTACHMENT TO AMENDMENT
with markings showing changes made

IN THE SPECIFICATION:

Paragraph appearing on page 4, lines 11-16 of the application:

There are two different issues important to this aspect of the invention. First the introduction of impurities is for the purpose of limiting the diffusion. For example, introduction of carbon reduces boron diffusion. Secondary, forming an alloy such as $\text{Si}_x\text{Ge}_{1-x}$ in the drain and source regions, is a band-gap engineering technique. For example, a $\text{Si}_x\text{Ge}_{1-x}$ source will allow a more efficient sinking of "holes" generated in the channel, thus reducing the "kink effect".

Page 7, lines 13 - 14: Figures 3A-3[B] D are schematic diagrams that illustrate another embodiment of the invention;

Page 7, lines 19 - 20: Figures 6A-6[B] E are schematic diagrams that illustrate another embodiment of the invention that forms a sidewall spacer;

Page 18, lines 9 - 17: A reactive ion etch is employed, as discussed above, to form a spacer 21, as shown in Figure 6B. Figures 6C and 6D illustrates the result of an isotropic etching process (e.g., reactive ion etching or wet chemical etching) performed to remove residues 22 of the spacer dielectric 21 from the exposed silicon sidewall of the SOI channel 5. Then, as shown in Figure 6[D] E, amorphous silicon 31 is deposited to form the source/drain regions. Alternatively, epi silicon may be re-grown from the exposed SOI channel extension 16 to fill up the drain and source regions. The remainder of the fabrication process is similar to the process discussed above with respect to Figures 2A-2BB.